To the Honourable Labi Kousoulis,

We are biologists and environmental scientists writing to express our concern with the potential development of the proposed Owls Head Provincial Park Reserve.

Over the past 15 years, the Ecology of Plants in Communities lab at Saint Mary's University has worked with collaborating NGO and NS provincial government partners to describe and classify heathland ecosystems across Nova Scotia. We have included the proposed Owls Head Provincial Park Reserve in our field surveys. Our years of data reveal that Owls Head is ecologically unique and of importance to biodiversity conservation.

Owls Head is characterized by repeating bedrock ridges that support a coastal barrens ecosystem. A globally rare heathland plant community occurs on the crests of the ridges and biodiverse bog wetlands predominate in the depressions between the ridges. This landscape pattern on the coast is only otherwise known from Blue Rocks, Lunenburg County, amidst residential developments with no conservation protection. Lakes, ponds, woodland, shrubland, beaches and various wetland habitats are also present at Owls Head and contribute to its conservation value. These conservation values and also the unique value of Owls Head to ecological research would be lost with its development as a golf course.

Vegetation on the bedrock ridges of Owls Head is dominated by a shrub called Broom Crowberry (*Corema conradii*). Broom Crowberry is endemic to northeastern North America, meaning this species can be found nowhere else in the world. In Canada, this plant only occurs within the maritime provinces and Quebec and within that limited range, Broom Crowberry is only common in Nova Scotia. If our province does not make an effort to protect this species, there will be no other opportunity elsewhere to protect it.

The loss of Owls Head Provincial Park Reserve is a loss to the conservation objectives of the Province of Nova Scotia under Our Parks and Protected Areas Plan and to that of conservation NGOs in the eastern shore region such as the 100 Wild Islands Campaign. Community members and charitable organizations have worked to establish a contiguous network of protected habitats that includes Owls Head. The development of Owls Head would fragment connectivity of the greater protected region and undermine the efforts of a large number of Nova Scotians.

A golf course development prioritizes the interests of a for-profit company and a few financially elite individuals who golf over that of a greater number of Nova Scotians who benefit from the economic, social and environmental values of Owls Head as a Provincial Park and integral piece in the protected areas network along the Eastern Shore. These values have been repeatedly advocated for by Nova Scotians living along the Eastern Shore in many public meetings, the financial and volunteer support of protected areas by private citizens, etc.

Because of the topography and geology of Owls Head, its development would require massive earthworks (e.g., blasting, excavation and infilling). The soils at Owls Head are mapped as "Rockland", which are considered of little value for forestry or agriculture uses. Our data reveal

these soils further consist primarily of only a thin veneer of upland humus over bedrock or wetland peat. Thus, soil would have to be trucked into the site in order for it to support any turf-forming grass species associated with a golf course.

A golf course development at this particular site would necessarily be harmful to the environment and conflict with environmental regulations. Significant environmental impact is likely, even if necessary environmental permitting were acquired, and an environmental management plan were put into place, and the best mitigating factors ensured.

Our data show that at least 28% (and up to 51%) of the area of Owl's Head Provincial Park is wetland. The largest area of these wetlands consist of interconnected and biodiverse bog wetlands that occur in mostly linear shaped features distributed across the entire area of the site. A golf course development at this site conflicts with Nova Scotia's Wetland Conservation Policy in that it would lead to: 1) Unavoidable loss of wetlands and 2) Loss of "wetlands of special significance" under the policy due to the presence of a) a salt marsh, b) biodiverse wetlands and c) bogs within protected areas – under the interim protections of a Provincial Park Reserve, and also because all wetlands at the site are continuous with the greater protected area assemblage of 100 Wild Islands (NGO) and the Eastern Shore Islands Wilderness Area (NS Gov).

Even with mitigating factors put in place, environmental impacts from these activities are likely to affect water quality, including the marine environment. Nearby Owls Head are eelgrass beds that are extremely sensitive to water quality from runoff and to smothering by sedimentation. Removal or addition of rock or soil would also result in the loss of globally rare plant communities.

According to provincial websites, beaches within Owls Head Provincial Park have been used for nesting by the Endangered Piping Plover. These beaches are largely inaccessible to the public due to the topography and vegetation of the site. A golf course development would impact species at risk by removing sheltering cover and increasing the presence of human-associated disturbances.

It is further noteworthy that due to the difficult terrain, other developments nearby have rarely succeeded. There are few residential developments in this type of terrain on adjacent private lands and those that exist were established at great expense. There are also ample examples of failure, such as one effort to develop an airstrip on the adjacent Borgles Island. Such failed development efforts have a lasting ecological impact. The exposed coastal forests in the footprint of the airstrip have not regenerated despite decades passing since the land was abandoned. Owls Head and adjacent sites are extremely wind exposed and their situation along the high-energy Atlantic shoreline means they are both vulnerable to erosion and difficult or unfeasible to restore once their ecological integrity has been affected.

We believe Owls Head Provincial Park best serves Nova Scotians maintained as a Provincial Park. Excising Owls Head from the larger protected areas network would be an egregious step

backward from the province's conservation commitments. As proud Nova Scotians, we also find this decision incredibly elitist because it removes public lands from the free access of all Nova Scotians for the benefit of a considerably small number of people and the private interests of golf developers.

Caitlin Porter, MSc, Research Associate
Jeremy Lundholm, PhD, Professor & Department Chair

Ecology of Plants in Communities Lab Biology Department Saint Mary's University

cc: the Honourable Stephen McNeil; the Honourable Iain Rankin, the Honourable Gordon Wilson, the Honourable Tim Houston, the Honourable Gary Burrill